

**MEDICAL PHYSIOLOGICAL SIMULATOR INCLUDING
A CONDUCTIVE ELASTOMER LAYER**

Abstract of the Disclosure

Conductive elastomeric circuits are used in various simulated physiological
5 structures such as tissues and organs, enabling feedback to be provided indicating
whether a simulated task is being performed correctly. For example, a surgical
trainer has a simulated human tissue structure made of an elastomeric composition, at
least one reinforcing layer of a fibrous material, and at least one flexible electrical
circuit. The surgical trainer preferably includes multiple areas for practicing surgical
10 skills, each with evaluation circuits for providing feedback regarding that skill.
Conductive elastomers are also incorporated into other types of medical training
simulators, to similarly provide feedback. In another embodiment, a simulated organ
has a conductive elastomeric circuit in the periphery of the simulated organ, enabling
feedback to be provided to evaluate whether a person is properly manipulating the
15 organ in response to a manual applied pressure.